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## **DETAILED ACTION**

1. In view of the Appeal Brief filed on 10/26/2009, PROSECUTION IS HEREBY REOPENED. New grounds of rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

/TODD E. MANAHAN/

Supervisory Patent Examiner, Art Unit 3776.

# Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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3. Claims 1-2 are rejected under 35 U.S.C. 102(b) as being anticipated by Nooning (US 5,393,227).

4. Nooning shows a dental model tray made entirely of a polymeric material (col. 4, lines 4-15) comprising a substantially planar base (planar base of Fig. 6, 11) that forms the floor upon which dental casting material is poured in forming a dental model; a side wall (4) extending upwardly from a perimeter of said base so as to form a cavity having an open top facing upwardly from the base (Fig. 6, 8, 11); a thin, membrane-like connector member (28) which is formed integrally with the perimeter of the base and a lower side edge of the side wall and thus connects the perimeter of the base with the lower side edge of the side wall (Fig. 11), said connector member being frangible and easily broken so that the side wall can be torn away from the base and discarded after dental casting material has hardened in the cavity formed by the side wall (col. 5, lines 55-61). With respect to claim 2, the connector member extends continuously along the entire length of the lower edge (bottom of 4) of the side wall which is connected to the perimeter of the base.

## Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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6. Claims 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nooning in view of Honstein et al. (US 2004/0166466).

7. Nooning discloses the device as previously described above and teaches the use of an articulator (col. 7, lines 5-20), but fails to show the connecting member being a plurality greater than 4 of spaced apart thin tabs.

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- 8. Honstein teaches a dental model tray (31) made entirely of a polymeric material ([0086], [0118]) comprising a substantially planar base (flat upper surface 59), a side wall (upper peripheral edge wall 33), and a thin, membrane-like connector member (dashed line in Fig. 1) being frangible, wherein the membrane-like connector member includes at least about four spaced apart thin tabs (frangible members 65; Fig. 1). Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention to modify Nooning by having the plurality of spaced apart thin tabs of Honstein in order to more easily separate the wall.
- 9. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nooning in view of Sim (US 2002/0072031).
- 10. Nooning discloses the device as previously described above, but fails to show the details of the articulator.
- 11. Sim shows an ell-shaped member (114, 116 in Fig. 5) comprising a first leg (116) and a second leg (114) in the shape of a flat strip disposed at an angle of 90 degrees relative to each other (Fig. 5), a distal end of said first leg attached to said base in a plane parallel to the upper surface of said base (Fig. 5), and an equivalent means for

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removably engaging the distal ends of second legs of respective ell-shaped members (snap fit hinge assemblies 108) so that they may pivot at the distal ends relative to each other (pivot axis X). Sim also shows that the flat strips are thin ([0077]); however Nooning/Sim fails to show a width of about 3/8 inch to 5/8 inch and a thickness of about 3/64 inch to 5/64 inch.

- 12. It would have been an obvious design choice to one having ordinary skill in the art at the time of invention to have selected the specified dimensions as it has not been disclosed that they serve any advantage or particular purpose, or solve a stated problem.
- 13. Claims 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nooning/Sim as applied to claim 5 above, and further in view of Huffman (2002/0102514).
- 14. Nooning/Sim discloses the device as previously described above and Nooning also shows that the articulator is attachable to the bases (col. 7, lines 10-12), but fails to explain the means for attaching said distal end of said one leg to said base comprising a slide block formed at said distal end of said first leg, a back wall extending upwardly from said back side of said base, and an upwardly extending slot-like opening in said back wall that snugly receives the slide block in firm engagement.
- 15. Huffman teaches a slide block (articulator attachment tongue 74) formed at said distal end of said first leg (at 72 in Fig. 5), a back wall (articulator attachment bar 34) extending upwardly from said back side of said base, and an upwardly extending slot-

like opening (articulator engagement slot 40) in said back wall that snugly receives the slide block in firm engagement ([0041]). Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention to modify Nooning/Sim's device by including Huffman's means for removably attaching the first leg to the base in order to make use of disposable articulators.

## Allowable Subject Matter

16. Claim 8 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

## Response to Arguments

17. Applicant's arguments with respect to claims 1-7 have been considered but are moot in view of the new ground(s) of rejection.

## Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew M. Nelson whose telephone number is (571) 270-5898. The examiner can normally be reached on Monday-Friday 7:30am-5:00pm EDT.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Todd Manahan can be reached on (571) 272-4713. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/MMN/

/TODD E. MANAHAN/ Supervisory Patent Examiner, Art Unit 3776